

**The Bill Blackwood
Law Enforcement Management Institute of Texas**

**Factors and Considerations for Responding to Incidents Involving
Suspicious CBRNE Substances.**

**An Administrative Research Paper
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ABSTRACT

The purpose of this research paper will be to provide a guide that will allow agencies to conduct a self-assessment in determining preparedness and, eventually, to properly mitigate calls involving suspicious substances. This researcher believes that a majority of law enforcement agencies are in need of a comprehensive plan for investigating incidents involving suspicious substances, and many agencies are lacking in the areas of training and equipping their first responders in handling these types of incidents. The survey instrument used to gather the information contained in this paper was a questionnaire distributed to 29 Texas law enforcement supervisors enrolled in Modules I and II of the Law Enforcement Management Institute of Texas (LEMIT) in September of 2006 and April 2008. The survey results indicated that 59% of the survey participants had responded to a terror hoax or incident following the attacks of September 11, 2001. The survey results also indicated that 76% of the respondents reported that their agencies do not provide any more training than what is federally mandated, and 100% of those feel that more training is needed. The hope is that with better awareness about an agency's response capabilities, law enforcement agencies will be able to formulate safer and more adequate response protocols to incidents involving suspicious Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) substances.

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INTRODUCTION

The threat of foreign and domestic terrorism in the United States exists now more than ever. Many specialists in this field believe that it is not a question of if the United States is attacked again but rather when. Wars in Iraq and Afghanistan, continuing violence in the Middle East, and increasing anti-American sentiment within the United States contributes to the likelihood that there will be another successful attack on American soil sometime in the near future.

On the front lines of this type of attack are police officers and fire fighters. As they were on September 11, 2001, the first responder to this type of attack will be the on-duty policeman or fireman. The difference now is that responding officers are more aware of and prepared for the response. Thousands of police officers all over the United States have now received specialized training in responding to incidents involving weapons of mass destruction.

The anthrax scare of 2001 that followed the attacks of September 11 required many law enforcement agencies to work independently when it came to investigating calls of suspicious packages or suspicious substances. Fire departments and police departments all over the United States were responding to calls of "suspicious white powder". Just as anywhere in the nation, agencies in the Dallas/Fort Worth area were inundated with these types of calls for both businesses and residences. Because of this, many agencies were responsible for mitigating these calls without assistance from outside agencies. Unless it was determined that there was a confirmed threat, responding police officers were unable to rely on the assistance of the federal government, neighboring police and fire departments, and specialized hazardous

materials (HAZMAT) units. The patrol officer became the first responder, responding to and investigating calls that he/she was neither trained nor equipped for.

These events brought many agencies to the realization that when it comes to a nationwide terror incident similar to what was experienced on the days following September 11, 2001, they stand alone. During a time like this, agencies all over the United States will be busy investigating their own incidents. Federal agencies under the Department of Homeland Security and the Department of Justice will be investigating their own confirmed threats involving weapons of mass destruction or other confirmed attacks. Neighboring cities, that are usually there to assist under mutual aid agreements, will most likely be busy investigating their own threats or standing by, waiting to respond to the next call.

As the potential for these types of attacks continues to exist, law enforcement agencies will continue to be called out to investigate and determine if an actual threat exists or if it is just a hoax. To protect the health and safety of the public and the first responders, clear procedures for responding to and investigating these types of calls are imperative.

The purpose of this research paper will be to allow for law enforcement agencies to determine response preparedness to incidents involving chemical, biological, radiological, nuclear and explosive (CBRNE) incidents. The researcher will examine various existing guidelines and recommendations utilizing several resources to provide a guide for any agency to determine preparedness, which will allow an agency to properly investigate calls involving suspicious CBRNE substances. Along with this, a review of literature and a survey will be conducted.

It is anticipated that the research will show that there is a need for a stronger response protocol to exist to serve as a guideline for the first responder during these types of incidents. This research will assist any department that does not have a response protocol in place, regardless of whether or not they have an existing/established response unit, in creating their own departmental response to an incident involving suspicious CBRNE substances. This will not only benefit the department in many ways but will also benefit the community served. It is believed that the research will indicate a need for continued training of first responders as well as a need to properly equip first responders with the tools necessary to properly and safely mitigate CBRNE incidents.

REVIEW OF LITERATURE

The first step in determining preparedness is to determine what resources an agency has available and what role the agency will play during the incident. The actual response by law enforcement to an incident involving the use or suspected use of a weapon of mass destruction (WMD) will vary from agency to agency based on several different factors. These factors include the size of the agency and the resources that it has readily available. These resources may include manpower, equipment, and specialists. Another factor is the magnitude and scope of the WMD incident and the primary responsibility of the agency during the incident. This responsibility may be restricted to response, investigation, incident management, mitigation, or rescue. The agency must determine what role it has been designated to play during the entire emergency response plan. Jurisdiction is another factor to consider. Agencies must consider what laws it has been charged with enforcing.

Drielak (2000) stated, “The role to be played by the law enforcement agency in the event of a WMD incident should be determined prior to actually developing the plans” (p. 80). Drielak (2000) further identified some basic tasks that a law enforcement agency should be expected to handle when responding to WMD incidents. These tasks are scene assessment and site security, stopping further harm from occurring, and aiding the injured. Law enforcement agencies must also be expected to initiate a criminal investigation and be prepared to assist other agencies in performing their duties. A law enforcement agency must also restore order and public confidence.

These aspects are common to all law enforcement agencies regardless of size and available resources. A small rural police department may only be able to conduct a scene assessment and then place the emergency response plan in effect by notifying and requesting additional resources that are already identified within the response plan. However, a large metropolitan police department with many resources may be equipped to independently handle all of these aspects. Having an emergency response plan in place allows an agency to respond in a proactive manner and can reduce the likelihood of further danger to its responders and the community.

Those responsible for developing response plans should not feel like they need to “reinvent the wheel” when developing the response plan. There are many plans available that are already in place that address how to respond to CBRNE incidents. It may be possible to modify existing plans to fit individual needs based on an agency’s resources. Drielak (2000) stated, “Even large law enforcement agencies that normally act independently may find themselves in need of assistance in the event a WMD incident occurs” (p. 83). What is important is that police departments have a plan and

that they train their responders on how to use the plan. Torr (2003) stated, “An effective response can significantly reduce casualties. The worst consequences of a chemical or biological attack may be averted if first responders and the public health community are adequately prepared” (p. 63). Maniscalco (2002) stated, “Law enforcement agencies will always be the cornerstone of an effective terrorism/tactical violence response. Plan to be self-sustaining for twenty four to seventy two hours prior to federal help arriving” (p. 16).

Public safety emergency responders will be the primary response to any incident involving weapons of mass destruction within the United States, even if that incident is a threat or hoax. Burke (2004) stated, “following the anthrax mail attack on the eastern United States in September 2001, emergency response organizations across the country were inundated with “white-powder” incidents”. Proper response protocol should be in place to assist those agencies in providing an adequate response: “Responding to the extremely high number of white-powder incidents taxed the resources of many response organizations” (Burke, 2004). Burke (2004) also noted that “an analysis of responses to white-powder/biological-agent incidents yielded weaknesses in preparedness at the local level.” One method in overcoming this weakness is having a proven response protocol that is tested and trained upon by those responders who will actually be mitigating the scene.

Law enforcement agencies need to determine who should be trained and what role that responder will play within the response. For example, a police patrolman would most likely be the first responder at a WMD incident and may be the first responder to initiate the emergency response sequence by notifying the proper personnel listed

within the response plan. A police supervisor may find himself/herself playing a more active role in the decision making process of mitigating the incident. These two responders need to be trained at the level to which they will be responding. Most patrol personnel should be trained at the “awareness” level. OSHA Code of Federal Regulations 29 CFR 1910.120 (q) outlines the different responsibilities of first responders engaged in an emergency response. This code of federal regulations also outlines other aspects that need to be addressed in the emergency response plan such as training, medical surveillance, and protective clothing.

According to 29 CFR 1910.120, first responders at the awareness level should have sufficient training or should have had sufficient experience to objectively demonstrate competency in an understanding of what hazardous substances are and the risk associated with them in an incident. Responders must have an understanding of the potential outcomes associated with an emergency created when hazardous substances are present. Responders should also have the ability to recognize the presence of hazardous substances in an emergency and have an understanding of the role that the first responder awareness plays in the employer’s emergency response plan. This role could include site security and control and an understanding of the use of the U.S. Department of Transportation’s Emergency Response Guidebook. Lastly, the responder should have the ability to realize the need for additional resources and make appropriate notifications to the communication center.

There are many organizations that develop guidelines and standards for homeland security. The Department of Homeland Security establishes standards and offers training for first responders in mitigating CBRNE incidents. The Department of Health

and Human Services conducts research and suggests standards that can reduce injuries and illnesses among workers that deal with hazardous substances. The Occupational Safety and Health Administration under the Department of Labor establishes protective standards and offers technical assistance to both employers and employees.

The Gilmore Commission was established by Congress on October 17, 1998. The purpose of the Gilmore Commission was to evaluate the progress of federal preparedness programs for local emergency response and to recommend strategies for effective coordination of preparedness and response efforts between federal, state, and local governments and response organizations. One of the objectives of the Gilmore Commission was to determine what it meant for local emergency responders to be prepared. The key factors within the Commission's definition of preparedness required the response to terrorism to be well planned and well coordinated. The Commission also noted that the response can include multiple participants: "The participants could include elected officials, police, fire, medical personnel, public health officials, emergency managers, intelligence, community organizers, the media, and the public at large" (Gilmore Commission, 2003). This approach is similar to the community policing theory of law enforcement in that many different components are used to solve an issue.

The International Association of Fire Chief's (2001) stated that "local and world events have placed the nation's emergency service at the forefront of homeland defense" (p. 3). The homeland defense system, which now includes both police and fire emergency responders will continually be tested by foreign and domestic terrorism. This

is evidenced by the February 2008 ricin incident in Las Vegas and an October 2007 incident in which two improvised explosive devices were thrown into the Mexican Consulate in New York City. Federal assistance will not always be available. It will be up to the initial responding agency, regardless of size and available resources to respond to the incident.

According to the Gilmore Commission (2003), 41% of surveyed law enforcement agencies across the United States reported that they updated their response plans for CBRNE following the September 11 terrorist attack. A review of the literature that was researched about this topic revealed a common theme. Law enforcement agencies must have an emergency response plan in place to deal with these types of incidents. Not only must a plan be in place, but that plan should be trained on by all first responders.

METHODOLOGY

The question that will be answered in this research paper is whether or not Texas law enforcement agencies are prepared to adequately and safely investigate incidents involving suspicious CBRNE substances. It is believed that the majority of responding agencies will have in place a comprehensive policy for investigating these types of incidents, but these agencies may not be prepared to execute the plan. A response plan that is tried and true is one that is tested and practiced upon by all its officers. This must be part of the plan. It is also anticipated that the research will show there still is a definite demand for the proper training and equipping of first responders. The information contained in this paper will help provide the tools needed for agencies to safely and adequately investigate calls involving suspicious CBRNE substances. Having

a plan in place will also allow for police agencies to respond to other non-terrorist/criminal incidents such as HAZMAT spills with an all-hazards type approach.

The instrument used to gather the information will be a questionnaire that will be distributed to Texas police supervisors attending Modules I and II of the Law Enforcement Management Institute of Texas (LEMIT) in September of 2006 and April of 2008. The survey will be given to supervisors representing various law enforcement agencies located throughout Texas. Twenty-nine of thirty-three surveys were returned and were filled out completely. The information obtained from the surveys will show whether the responding agencies are prepared to safely and adequately investigate calls involving suspicious substances.

FINDINGS

Twenty-nine of thirty-three police supervisors attending the Bill Blackwood Law Enforcement Management Institute of Texas Modules I and II were surveyed. Overall, 88% of the surveys were returned to the researcher (Table I).

Table I. Survey response percentages for participants.

<i>Modules:</i>	<i>Module I (2006)</i>	<i>Module II (2008)</i>	<i>Total Survey Returned</i>
<i>Respondents Surveyed:</i>	15 of 18 respondents surveyed.	14 of 15 respondents surveyed.	29 of 33 respondents surveyed.
<i>Return Rate:</i>	83% Return Rate	93% Return Rate	88% Return Rate

The respondents were asked if their agency had responded to a terror incident or hoax following the events of September 11. Seventeen of the twenty-nine respondents reported that their agency had, indeed, responded to a terror incident or hoax (Table II).

Table II. Agencies that experienced a terrorist hoax or incident following 9/11.

Modules:	Module I (2006)	Module II (2008)	Total
<i>Following 9/11, Did your agency experience terrorist hoaxes or incidents?</i>	9 of 15 responded YES	8 of 14 responded YES	17 of 29 responded YES
Percentage:	60%	57%	59%

When asked whether their agencies had a critical incident plan, 23 of 29, or 79%, of those participants responded that their agency did have a written critical incident plan already in place (Table III).

Table III. Percentage of agencies with a written critical incident plan.

Modules:	Module I (2006)	Module II (2008)	Total
<i>Does your agency currently have a written critical incident plan?</i>	11 of 15 responded YES	12 of 14 responded YES	23 of 29 responded YES
Percentage:	73%	88%	79%

Of the 23 participants who responded to having a written critical incident plan in place, 22 of them, or 96%, responded to having been trained on their agency's critical incident plan (Table IV).

Table IV. Respondents who have received training on agency's critical incident plan.

Modules:	Module I (2006)	Module II (2008)	Total
<i>Have you received training on your department's critical incident plan?</i>	10 of 11 responded YES	12 of 12 responded YES	22 of 23 responded YES
Percentage:	91%	100%	96%

The respondents were also asked if they have participated in mock critical incident exercises. Eighteen of the twenty-nine respondents reported having participated in mock critical incident exercises (Table V).

Table V. Respondents who have participated in critical incident exercises.

<i>Modules:</i>	<i>Module I (2006)</i>	<i>Module II (2008)</i>	<i>Total</i>
<i>Have you ever participated in a mock critical incident exercise with your department?</i>	7 of 15 responded YES	11 of 14 responded YES	18 of 29 responded YES
<i>Percentage:</i>	47%	78%	62%

In regards to HAZMAT personal protective equipment (PPE), 15 of the 29 respondents reported they work for an agency that issues HAZMAT personal protective equipment (PPE). (Table VI).

Table VI. Percentage of agencies that issue HAZMAT personal protective equipment.

<i>Modules:</i>	<i>Module I (2006)</i>	<i>Module II (2008)</i>	<i>Total</i>
<i>Does your agency issue HAZMAT personal protective equipment?</i>	7 of 15 responded YES	8 of 14 responded YES	15 of 29 responded YES
<i>Percentage:</i>	47%	57%	52%

Of the 15 respondents who have been issued HAZMAT PPE, only 52% actually carry their issued HAZMAT PPE with them while on duty (Table VII).

Table VII. Respondents who carry HAZMAT PPE while on duty.

Module:	Module I (2006)	Module II (2008)	Total
<i>Do you carry your HAZMAT PPE with you while on duty?</i>	4 of 7 responded YES	6 of 8 responded YES	10 of 15 responded YES
Percentage:	57%	75%	67%

In regard to training, the respondents were asked if their agencies offered training beyond what is federally mandated. Twenty-two of the twenty-nine participants responded to receiving no further training than what is federally mandated (Table VIII).

Table VIII. Percentage of departments that offer further education or training.

Modules:	Module I (2006)	Module II (2008)	Total
<i>Does your department offer further education or training, beyond the required FEMA/NIMS classes?</i>	12 of 15 responded NO further training.	10 of 14 responded NO further training.	22 of 29 responded NO further training.
Percentage:	80%	71%	76%

Of those 22 respondents, all 22 felt that more training was needed within their department (Table IX).

Table IX. Percentage of respondents who stated that further training is needed.

Modules:	Module I (2006)	Module II (2008)	Total
<i>Do you personally feel that there is a need for further mandated training or education within your department?</i>	12 of 12 responded YES	10 of 10 responded YES	22 of 22 responded YES
Percentage:	100%	100%	100%

In regards to specialized HAZMAT units, the respondents were asked if they had a specialized unit within their agency to handle HAZMAT incidents. Twenty-five of the twenty-nine participants responded to not having a specialized HAZMAT unit within their agency (Table X).

Table X. Percentage of departments with specialized units to handle HAZMAT incidents.

<i>Modules:</i>	<i>Module I (2006)</i>	<i>Module II (2008)</i>	<i>Total</i>
<i>Does your department have a specialized unit within to handle HAZMAT call or situations (outside the use of the fire department)</i>	14 of 15 responded NO	11 of 14 responded NO	25 of 29 responded NO
<i>Percentage:</i>	93%	78%	86%

Of the 25 who responded to not having a specialized HAZMAT unit, 20 participants indicated a need for such a unit within their jurisdiction (Table XI).

Table XI. Percentage of respondents who stated a need for HAZMAT units with jurisdiction.

<i>Module:</i>	<i>Module I (2006)</i>	<i>Module II (2008)</i>	<i>Total</i>
<i>Do you personally feel a need for this type of specialized unit, either in your department or in developing a multi-jurisdictional unit?</i>	13 of 14 responded YES	7 of 11 responded YES	20 of 25 responded YES
<i>Percentage:</i>	93%	64%	80%

DISCUSSIONS/CONCLUSIONS

The threat of terrorism, both foreign and domestic, continues to exist. It is a responsibility as law enforcement officers to prepare, train, and equip for these types of incidents. Law enforcement agencies cannot have an “it won’t happen here” mentality and cannot say that they just do not have the money or resources to handle these types of incidents. The fact is that acts of terrorism can occur anywhere and anytime. It is likely that the officer working his or her beat will be the first responder to a CBRNE incident in their jurisdiction. This officer needs to be trained, prepared, and equipped with the necessary tools to properly handle these incidents.

The purpose of this research paper was to allow agencies to conduct a “self-assessment” in determining response capabilities for responding to incidents involving CBRNE substances. The researcher examined various existing guidelines and recommendations utilizing several resources that allowed for an agency to conduct its assessment and properly investigate calls involving suspicious CBRNE substances. Along with this, a review of literature and a survey was conducted.

It was anticipated that the research would show that there is a definite need for a good response plan to exist to serve as a guideline for the first responder. The researcher hypothesized that most respondents to the survey instrument would indicate a need for more training, specialized equipment, and a need for a proper response protocol as it relates to responding to incidents involving suspicious CBRNE substances. Participants of the Bill Blackwood Law Enforcement Management Institute of Texas, representing 29 law enforcement agencies throughout the State of Texas,

were surveyed. The information provided by the participants was analyzed to determine similarities and differences in response preparedness.

The results of the survey reinforced the initial hypothesis. Respondents indicated a definite need for more training, specialized equipment, and a need for a proper response protocol when responding to incidents involving suspicious CBRNE substances. The researcher also discovered an unintended finding while conducting research for this project. The project focused primarily on developing a response plan for responding to CBRNE incidents in the context of a terror attack. However, CBRNE incidents can and have occurred in many other ways. Hazardous substances are all around everywhere. Hazardous materials are transported on roads, waterways, and air and rail ways daily. According to the United States Department of Transportation, there were 17,063 highway incidents, 1,560 air incidents, 960 rail incidents, and 115 water incidents, in 2007, that resulted in hazardous materials being released. Having an all-hazards type response plan can allow agencies to respond to incidents involving CBRNE substances with a prepared plan that is practiced and proven to allow for proper mitigation of the incident with respect to minimizing death/injury to the public and harm to the environment.

This study was limited somewhat in that all of the survey respondents were from agencies of varied size and resource capabilities located within the State of Texas. This provides a great overview of the prevailing issues that would be found among Texas law enforcement agencies but lacks the geographic diversity of a more localized survey.

This paper was not written in an attempt to create a “one size fits all” model policy. Nor was it the intention of this researcher to create a new method or guide for

responding to incidents involving suspicious substances. It is intended to give Texas law enforcement agencies a better understanding of the critical factors involved when investigating these types of incidents and allowing agencies to utilize already existing model policies and guidelines. The hope is that with a better awareness of an agency's response capabilities, law enforcement agencies will be able to formulate safer and more adequate response protocols to incidents involving suspicious substances.

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APPENDIX

Survey Instrument

1. Years of Police Service: " <5years " **5-15 years** " >15 years
2. What is the size of your department? " <25 " 25-50 " 51-99 " 100-500 " >500
3. Following 9/11, Did your agency experience terrorist hoaxes or incidents? " Yes " No
4. Does your agency currently have a written critical incident plan? " Yes " No
5. If Yes. Have you received training on your department's critical incident plan? " Yes " No
6. Have you ever participated in a "mock" critical incident exercise with your department?
" Yes " No
7. Does your agency issue Hazmat personal protective equipment (HAZMAT PPE)? " Yes " No
8. If Yes. Do you carry your Hazmat PPE with you while on duty? " Yes " No
9. Does your department have a specialized unit within to handle HAZMAT calls or situations (outside the use of or response from the fire department)? " Yes " No (If no go to question 11)
10. If Yes,
A. does your department have policies or some type of written guidelines for handling HAZMAT calls or situations? " Yes " No
11. If No,
A. Do you personally feel there is a need for this type of specialized unit, either in your own department or in developing a multi-jurisdictional unit? " Yes " No

B. If yes, Do you further personally feel there would be a need for a written policy or guideline under which this type of unit operates? " Yes " No
12. Does your department offer further education or training, beyond the required FEMA NIMS classes?
" Yes " No
13. If Yes, Briefly explain:
14. If No, do you personally feel there is a need for further mandated training or education within your department?
" Yes " No